ABSTRACT OF THE DISCLOSURE

The invention provides for the adaption of acoustic models for a client device at a server. For example, a server can couple to a client device having speech recognition functionality. An acoustic model adaptor can be located at the server and can be used to adapt an acoustic model for the client device. The client device can be a mobile computing device and the server can be coupled to the mobile client device through a network. The acoustic model adaptor adapts the acoustic model for the mobile client device based upon digitized raw speech data or extracted speech feature data received from the client device when there is a network connection between the client device and the server. The server stores the adapted acoustic model. The mobile client device can download the adapted acoustic model and store the adapted acoustic model locally at the client device.